



**UNITED STATES DEPARTMENT OF COMMERCE  
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/297,256	04/28/99	SUNDHOLM	1001

LADAS & PARRY  
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QM02/0324

KIM, C. EXAMINER

ART UNIT	PAPER NUMBER
3752	

03/24/00

DATE MAILED:

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
09/297,256

Applicant(s)  
Sundholm

Examiner  
Christopher S. Kim

Group Art Unit  
3752



☒ Responsive to communication(s) filed on 28 Apr 1999

☐ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claim

☒ Claim(s) 1-12 is/are pending in the applicant

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-12 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☒ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been  
☒ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 6

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Finland on September 15, 1997. It is noted, however, that applicant has not filed a certified copy of the Finland application as required by 35 U.S.C. 119(b).

### ***Specification***

2. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

3. The disclosure is objected to because of the reference to "claims 2 to 12" on page 2, line 23. Reference to claims in the specification is improper since the claims may change during prosecution. Recommend applicant delete lines 22-23 on page 2.

4. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification appears to be a literal translation of a foreign document. The specification is replete with terms which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. In addition, the specification should be revised for proper idiomatic English. Examples of some unclear, inexact or verbose terms used in the specification are: on page 1, line 29, "for technically that"; on page 4, lines 19-20, "making the...in the group desired".

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***Claim Objections***

5. Claim 11 is objected to because of the phrase "of the type". It is uncertain if applicant is claiming a range within a range or if applicant is claiming spray heads that produce mist-like spray. Suggest applicant delete "of the type".

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-6, 11, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Sundholm.

Sundholm discloses, in figure 1, a fire fighting apparatus comprising: a plurality of spray heads 1, 1a; a tube system 3, 4; at least one drive gas source 2; a release means (inherent in the device); and a stop/opening valve (no reference number but shown downstream of each gas source). As to the extinguishing medium being constituted by a volume of the tube at least to a substantial extent, an extensive tube system in an engine room of a ship inherently constitutes a volume substantially larger than the volume of the extinguishing medium in the gas source 2. The apparatus is divided into main sections, each containing a gas source 2. Figure 1 shows one spray

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head 1 per zone while figure 2 shows multiple spray heads 13 per zone. The drive gas is nitrogen (column 1, line 40) having a pressure of 30 to 400 bar (column 2, line 65 discloses 100 to 200 bar). The spray heads generate fog-like spray of water (column 1, line 41 and line 51).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sundholm as applied to claim 6 above, and further in view of Willms.

Willms discloses, in figure 1, a fire fighting apparatus with zone 1 and zone 2 each zone having a release means 20, 20A arranged along tube 12 for releasing a group of spray heads 15, 15A. Each group of spray heads contains a solenoid valve 17, 17A. It would have been obvious to a person having ordinary skill in the art at the time of the invention to use the zone release means and solenoid valve of Willms in the fire fighting apparatus of Sundholm to conserve the extinguishing medium.

10. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sundholm as applied to claim 1 above, and further in view of Jamison.

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With respect to claim 9, Jamison discloses, in column 5, lines 6-11, a text by Donald W. Mitchell titled Mines Fires where fog-like spray water is critical in fighting mine fires. It would have been obvious to a person having ordinary skill in the art at the time of the invention to use the fire fighting apparatus of Sundholm in a mine tunnel as disclosed by Jamison. The device of Sundholm placed in a tunnel would inherently follow the longitudinal direction of the tunnel.

With respect to claim 10, Sundholm discloses, in column 3, lines 23-25, spray heads 22, 23 arranged in opposite direction. Sundholm does not disclose different heights at which the spray heads are placed. The height placement of spray heads is a matter of design choice in directing the spray of water to a particular location.

### *Conclusion*

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher S. Kim whose telephone number is (703) 308-8336. The examiner can normally be reached on Monday-Thursday from 6:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andres Kashnikow, can be reached on (703) 308-1137. The fax phone number for this Group is (703) 305-3588.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1113.

  
ANDRES KASHNIKOW  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700

3-23-00

CK

March 21, 2000